

# VITO® X1

## User Manual





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# 1. Introduction

Dear VITO® customer,

thank you for choosing this product by VITO® AG.

Please read the manual carefully to familiarize yourself with the handling of your VITO® filtration system to ensure proper use. Your local dealer and the customer service are available to answer your questions and provide support.

We are grateful for comments and suggestions concerning the VITO® filtration system and/or the manual. (Please see contact information contained in this manual.)

We hope that you enjoy your VITO® oil filter system for a long time and increase the efficiency in your establishment. With VITO® you own a high-quality oil filter system from which you can expect a long life and efficient support for your work.

## 2. General Notes

This user manual contains important information about the handling of the VITO® X1. Please read this document carefully and before using your VITO® X1. Keep this manual easy available for more information. VITO® X1 is an oil filtration system, designed for the cleaning of frying oil / shortening.. Frying will contaminate the oil with burned particles. VITO® X1 makes it possible to clean the oil straightly out of the fryer. Filtering with VITO® X1 prolongs the lifetime of the oil. We recommend filtration with VITO® X1 once or twice a day. The VITO® X1 particle filter can be used several times before it has to be changed. As soon as the oil can't be vacuumed anymore or the filter basket for the particles is full, the content should be disposed according to local regulations.

## 3. Legal information

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## 4. Safety guidelines / symbol explanation

Wrong treatment of the VITO® can lead to dangers and injuries. The following should be observed. Potential dangers are marked with these signs:



### Warning

Danger of injury if this is not observed



### Risk of electric shock

by incorrect use or case opening



### Danger of slipping

if oil is spilled to the floor



### Caution

Important security tip



### Danger of burnings

for the user of VITO® by incorrect application



### Operating instruction

Information about the handling of VITO® oil filter system



### Danger of hearing disorder

for the user of VITO® X1



### Protection class 1

Use the VITO® X1 only in grounded conditions



## 5. VITO® X1 delivery contents

- **VITO® X1**
- Power cord
- Lance with tube and quick-release fastener
- Top cover
- Filter basket
- Manual
- Warranty card
- Short instruction
- Particle filter 1 piece
- Inbus key
- Wrench

## 6. VITO® X1 - Overview

### 6.1 Product description:

- 01** Switch lever Return / Extract
- 02** Power indicator (red LED)
- 03** Extract (blue LED)
- 04** Return (green LED)
- 05** Rotary switch (Return / Off / Extract)
- 06** Power Cord Connector
- 07** Heat - Vents



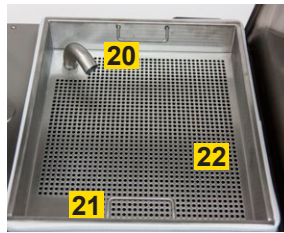
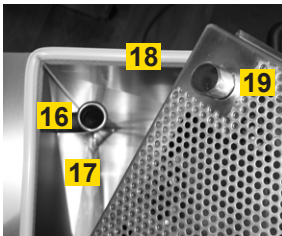
- 08** Lancetube (removable)
- 09** Side-handles
- 10** Top cover with handle
- 11** Front handle
- 12** Lance with handles



## 6.2 Product description:

Lancetube quick connector (closed) **13**

Lancetube quick connector (open) **14 + 15**



Connecting Piece **16**

Tank **17**

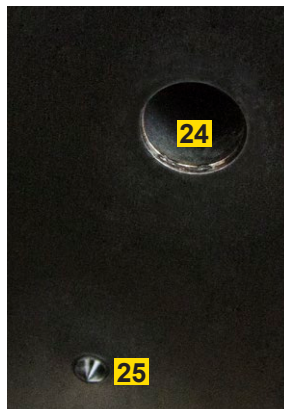
Seal **18**

Filter basket inflow bottom **19**

Filter basket inflow top **20**

Filter basket handles **21**

Filter basket **22**



Particle filter **23**

Turbine intake **24**

Oil-level-sensor **25**

## 7. VITO® X1 utilization

### 7.1 Designated use



- VITO® is designed for commercial use.
- **Follow the safety instructions!** Filtration is only possible if the oil is liquid.
- VITO® should only be used by suitably trained staff!
- VITO® oil filter system is designed for intermittent duty

### 7.2 NON designated use



***The nonobservance of the contents described in the manual can lead to damage or malfunction of VITO® or can lead to severe human injuries!!!***



- VITO® is **NOT** approved for cleaning / filtering of liquids other than frying oil / shortening!
- Do **NOT** use or store VITO® outside! It will be damaged by rain, humidity or cold!
- VITO® is **NOT** designed for continuous duty! Risk of overheating / fire hazard!
- Do **NOT** cover vent slots
- Do **NOT** touch the power plug with wet hands!
- Do **NOT** jam or bend the power cord!
- The use of VITO® is strictly prohibited for children!
- VITO® must not be operated on a connection other than protection class I (grounded)

***No liability will be accepted for improper use!***

## 8. Preparation before use

### 8.1 Safety Guidelines



- Clean VITO® before using it the first time. Make sure that the local voltage is conform to the voltage on the type label of VITO®!
- Do **NOT** get the power cord in contact with hot oil / shortening!
- The maximum operating temperature is 175°C / 347°F! (oil temperature)
- Do **NOT** run the pump without oil!
- Pay attention to heating elements, grids or thermal sensors in the fryer!
- Check the function of the oil level detection!
- To lift or transport VITO® only pick it up using the black side-handles!
- Use ear muffs or proper hearing protection!
- Use safety gloves!
- **DO NOT RETURN THE OIL WITHOUT PLACING THE LANCE INTO THE FRYER!**

### 8.2 Storage of VITO®

- Allowed ambient / storage temperature: +10 to +35°C (50° to 95°F)



# 9. Filtration process

## 9.1 Requirements

1. Insert the filter basket **22** into the tank. Filter basket **22** inflow bottom **19** must be plugged into connecting piece **16** inside the tank.
  2. Place the particle filter **23** in the filter basket **22**  
(See chapter 12 Particle filter change).
  3. Check if the seal **18** is completely (all around the machine) covered by the filter basket **22**
  4. Put the top cover **10** on the X1 and pay attention to the correct seating.
  5. Make sure that the lance tube quick connector **13** fits well.
- Operation without a proper set up of the filter basket **22** and correctly placed top cover **10** is not possible, there is no vacuum created.



## 9.2 Operation Notes

- The filtration process and the back pumping process can be interrupted anytime by turning the switch **05** to "OFF"
- **Do NOT move VITO® while filtration is in progress!**
- Only use VITO® in a straight position!
- **Do not operate VITO® without the filter basket! Device may be damaged!**
- The Power indicator (red LED) **02** is depending on what is chosen "Return" (green LED) **04** "Extract" (blue LED) **03** are lit during filtration process.



## 9.3 Starting the suctioning process

1. Place VITO® securely next to the fryer
2. Make sure that the switch **05** is on position "OFF"
3. Put the lance **12** into the fryer and hold it tight or ensure a secure hold
4. Plug in VITO®. Power indicator (red LED) **02** is active
5. First turn the switch lever **01** and then turn the switch **05** to position "Extract"
6. Indicator "Extract" (blue LED) **03** is lit during the suctioning process.
7. If switch **05** is in position "Extract" and blue light **03** is not lighted, the oil-level-sensor **25** is active. => Return oil to fryer. See point 9.5 (Pumping back process) or see point 11.1 how to clean the oil-level-sensor **25**.



### 9.4 Finishing the suction process prematurely



1. Take the lance **12** out of the oil.
2. Let the suctioning process continue for 10 seconds
3. Turn the switch **05** to position "OFF"
4. Clean the lance **12** with a cloth
5. Store the lance **12** in the lance tube
6. Plug out VITO®

### 9.5 Starting the pumping back process



1. Place VITO® securely next to the fryer
2. Make sure that the switch **05** is on position "OFF"
3. Put the lance **12** into the fryer and hold it tight or ensure a secure hold
4. Plug in VITO®. Power indicator (red LED) **02** is active
5. First turn the switch lever **01** and then turn the switch **05** to position "Return"
6. Indicator "Return" (green LED) **04** is lit during the pumping back process

### 9.6 Finishing the pumping back process prematurely



1. Take the lance **12** out of the oil.
2. Let the pump process continue for 10 second and switch the lever **01** once to "Extract" and back to "Return"
3. **Caution: At the end of the back pumping process air escapes out of the lance, which may lead to bubbles and the resultant splashing.**
4. Turn the switch **05** to position "OFF"
5. Clean the lance **12** with a cloth
6. Insert the lance **12** in the lance tube **08** for storage
7. Plug out VITO®

## 10. Storage



- DO NOT put VITO® into a cold storage room! Condensation will destroy the electric parts.

# 11. Maintenance and Service

## 11.1 Important Notes

- Clean the tank **17**, the sensor **25** and filter basket **22** carefully every time you change the particle filter **23**
- Clean VITO® only when the machine is cold
- DO NOT use abrasive cleaners
- DO NOT use a wire brush or similar
- Unscrew the power cord only in case of service!

## 11.2 Cleaning Preparation

1. Make sure that VITO® is cooled down
2. Open the top-cover **10**
3. Dispose particle filter **23** (See 14.2)
4. Manual or machine cleaning of the filter basket **22** and top-cover **10**
5. Clean the remaining parts of the unit

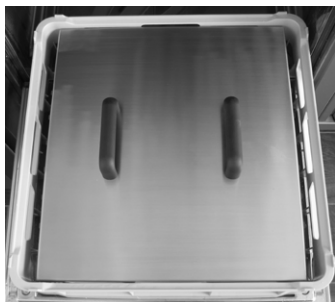
**Make sure that you clean the VITO® considering the HACCP rules or your own country regulations!**

## 11.3 Manual Cleaning

1. Clean the control panel (lever, switch ect.) with a damp cloth! DO NOT use running water, because this will harm the electrical system of the device!
2. Clean remaining parts with soapy water.
3. Dry VITO® with a towel

## 11.4 Machine cleaning

1. Put filter basket **22** and cover **10** into the dishwasher.
2. Start cleaning program.
3. Clean the control panel with a cloth!



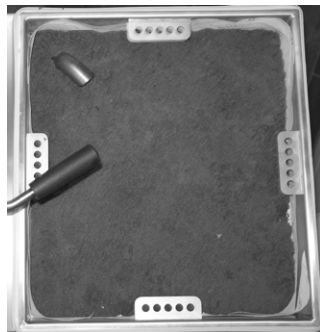
## 12. Particle Filter Change



- Change the particle filter **23** only if necessary. The time of change is based on usage of VITO® and the degree of pollution of the frying oil.
- The filter has to be changed when there is no performance or the filter is full.



Don't leave gaps between the filter and the edges of the filter basket!  
Filter empty



Filter full

## 13. Accessories

Additional accessories for your VITO® are available:



**Spare filters for VITO® X1:**  
**bundle size:** 1 Box (50 Pcs.)  
**Material:** cellulose



**VITO® Oiltester:**

- Checks TPM of your oil
- Prevents changing oil too early
- Ensures high quality
- Quick temperature check

Need something else? Contact us for other solutions. Our customer support will gladly assist you with all your questions.

# 14. Waste disposal

## 14.1 Packaging disposal

- The packaging should be recycled  
or
- Store the packaging carefully

## 14.2 Filter disposal

- Used filters must be disposed according to the local regulations

## 14.3 Device disposal

If VITO® reaches the end of its life-cycle it must be disposed accordingly. This disposal is handled by VITO® AG as defined by law. Send VITO® to: VITO® AG

Eltastrasse 6

78532 Tuttlingen (Germany)

For further questions please contact your local dealer or the VITO® AG customer support



## 14.4 WEEE (Waste Electrical and Electronic Equipment) Statement

To protect the global environment and as an environmentalist, VITO® AG must remind you that...Under the European Union ("EU") Directive on Waste Electrical and Electronic Equipment, Directive 2002/96/EC, which takes effect on august 13, 2005, products of "electrical and electronic equipment" cannot be discarded as municipal waste anymore and manufacturers of covered electronic equipment will be obligated to take back such products at the end of their useful life. Systemfiltration will comply with the product take back requirements at the end of the life cycle of VITO®-branded products that are sold in the EU. You can return these products to local collection points.



# 15. Storage recommendations for filters

During storage do not expose the particle filters to extreme temperature or humidity, for example near a heat source, air conditioning or direct sunlight. Heat, cold and humidity have a negative effect on the properties of the particle filter, especially after removing or opening the bag packaging. In any case the particle filter must not be exposed to frost, as this can cause damage to the microstructure of the filter, which impairs the functionality of the particle filter.

- Store dry at 60-65% relative humidity
- Room temperature 24°C ± 5°C (78°F ± 40°F)
- Do NOT put weight on pallets and filter parcels





- Avoid sudden temperature changes
- Store in the cardboard packaging in sealed bag
- Maximum height of the filter stack 185cm (6 ft) on pallet

Under observance of the above conditions, the storage period will be 3 years.

## 16. Troubleshooting

Malfunction	Possible cause	Remedial action
Power indicator (red LED) stays inactive	<ul style="list-style-type: none"><li>• Mains plug not plugged in</li><li>• Mains cable is defective</li><li>• fuse is defective</li></ul>	<ul style="list-style-type: none"><li>• Plug in <b>VITO®</b></li><li>• Please contact service</li><li>• Please contact service</li></ul>
<b>VITO®</b> makes loud noises during filtration	<ul style="list-style-type: none"><li>• Pump or turbine defective</li></ul>	<ul style="list-style-type: none"><li>• Please contact service</li></ul>
One of the lights is not lit but device can still be started	<ul style="list-style-type: none"><li>• LED defective</li></ul>	<ul style="list-style-type: none"><li>• Please contact service</li></ul>
<b>VITO®</b> cannot be started	<ul style="list-style-type: none"><li>• Control unit defective</li></ul>	<ul style="list-style-type: none"><li>• Please contact service</li></ul>
Line fuse/ Ground fault circuit interrupter (GFCI) blowout	<ul style="list-style-type: none"><li>• Net protection or other electronic components are blocking</li></ul>	<ul style="list-style-type: none"><li>• Please contact service</li></ul>
Low back pumping performance	<ul style="list-style-type: none"><li>• Pump blocked</li><li>• Pump defective</li><li>• Tube blocked</li><li>• Tubing blocked</li></ul>	<ul style="list-style-type: none"><li>• Clean</li><li>• Please contact service</li></ul>
No or too little vacuum flow	<ul style="list-style-type: none"><li>• Particle-filter is blocked</li><li>• Particle-filter is full</li><li>• Filter basket is full</li><li>• too much space between cover and the tank</li><li>• pipe is blocked</li></ul>	<ul style="list-style-type: none"><li>• Change particle filter</li><li>• Change particle filter</li><li>• Empty the filter basket</li><li>• Position the cover correctly</li><li>• Clean</li></ul>
Particles in the filtered oil	<ul style="list-style-type: none"><li>• No filter inserted</li><li>• Filter inserted incorrectly</li></ul>	<ul style="list-style-type: none"><li>• Insert filter</li><li>• Insert filter as described in the manual</li></ul>
No extraction and blue LED off	<ul style="list-style-type: none"><li>• Oil-level-sensor dirty</li><li>• Max. oil level reached</li><li>• Filter defect</li></ul>	<ul style="list-style-type: none"><li>• Change filter</li><li>• Clean</li><li>• Return the oil and try again</li></ul>

Should other issues appear, get in contact with the customer support or your local dealer! Contact details on chapter 3 “Legal information”.

## 17. VITO® X1 - technical data



Nominal voltage According to country, see type sign	220 - 240 V ~ ±10% 50 bis 60Hz 100 - 120 V ~ ±10% 50 - 60Hz
Nominal current under load	approx. 6,5 A bei 230 V approx. 10,51 A bei 115 V
Operating temprature	Max. 175°C / 347F
Max. power / Nominal power	1,2kW
Weight	63kg / 138,9 lbs
Acoustic signal	no
Taking particles	10l / 22lb
Tank volume	80l / 176lb
Noise level	aprox. 90dBA
Dimensions (W x H x L)	610 x 450 x 890mm 24,02 x 17,72 x 35,04in
Storage temperature	0°C/50°F to max. 30°C / 86°F
User control	Rotary switch
Application	Perfect for e.g. 4 x 20l (max. 80l)
Particle filter	cellulose
Operation mode	Intermittant operation
Protection level	IP23
Oil-level-sensor switching level	approx. 80l / 176lb

# 18. Declaration of conformity

Issued by

**VITO® AG**  
**Eltastrasse 6**  
**78532 Tuttlingen (Germany)**

for the product  
**VITO® X1**  
international patent pending

The professional fat-filtration-equipment is manufactured and tested according to the following standards:

For the purposes of the EC – Machinery Directive 89/392/EEC, as amended by Directive 98/37/EC and developed in terms of the new Directive 2006/42/EC, were designed and manufactured.

This declaration applies to all identical copies of the product.

The following harmonized standards are applied:

**DIN EN 292**, Safety of machinery, equipment and facilities  
**DIN EN 60204.1**, electrical equipment for industrial machinery

The product, mentioned above, meets the following basic requirements that laid down in Council Directive on the approximation of the laws of the member states relating to electromagnetic compatibility (2004/108/EC).

The following standards are applied:

**EN 55014-1:2006** electromagnetic compatibility, electromagnetic interference  
**EN55014-2:1997 + A1:2001** electromagnetic compatibility, immunity  
**EN 61003-2:2006** devices with analog inputs, limits, devices <16A  
**EN 61003-3:2008** voltage fluctuation devices <16A

Tuttlingen, October 22, 2013



Andreas Schmidt  
CEO (Chief Executing Officer)  
VITO® AG



19. Your notes



# 19. Your notes

# 19. Your notes



